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## (54) ORGANIC ELECTROLUMINESCENCE ELEMENT

## (57) Abstract:

PROBLEM TO BE SOLVED: To enhance stability, durability, and luminescent brightness by interposing at least one layer of layers containing at least one of azaindolizine derivatives between a pair of electrodes. SOLUTION: As azaindolizine derivatives prepared by substituting one carbon atom in an indolizine skeleton with a nitrogen atom, a compound having 1- or 2azaindolizine skeleton represented by formulas I, H are suitable. Preferably, the derivative is contained in a hole injection transport layer or a luminescent layer, and contains at least one of a luminescent organic metal complexes and triarylamine derivatives, and an electron injection transport layer may be interposed between electrodes. For example, when the hole injection transport layer is contained, at a voltage of 6.3-6.7 V, green light having an initial brightness of 450-500 Cd/m2 and a half life of 500-620 hours are realized. In the formulas I and II, X1-X16 represent hydrogen, halogen, a straight chain, branched, or cyclic alkyl group or alkoxy

$$X_1$$
 $X_2$ 
 $X_3$ 
 $X_4$ 
 $X_5$ 
 $X_5$ 
 $X_5$ 

group, a substituted or non-substituted aralkyl group, aryl group, aralkyloxy group, or aryloxy group.

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